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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,745	08/19/2003	Chung-Chih Wu	0698-0156P	3775
2292	7590	02/09/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			LOKE, STEVEN HO YIN	
			ART UNIT	PAPER NUMBER
			2811	

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/642,745

Applicant(s)

WU ET AL.

Examiner

Steven Loke

Art Unit

2811

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/19/03</u> . | 6) <input type="checkbox"/> Other: _____ |

1. Applicant's election with traverse of claim 1 in the reply filed on 11/22/04 is acknowledged. The traversal is on the ground(s) that it should be no undue burden on the Examiner to consider all claims in the single application. This is found persuasive and the restriction requirement is withdrawn.

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The claimed subject matters of claims 29, 30, 31, 32, 33, 34 and 42.

4. Claims 2, 11, 14, 23, 37, 39 and 46 are objected to because of the following informalities: It is believed that claim 2 should be in one complete sentence instead of in two separate sentences. Claim 11, line 1, the phrase "the organic light-emitting device" has no antecedent basis. Claim 14, line 4, claim 23, line 4, claim 39, line 4, the phrase "organic light-emitting" is unclear whether it is being referred to "organic light-emitting device". Claim 37, lines 4-5, the phrase "each of the organic light-emitting layer" is unclear whether it is being referred to "each of the organic light-emitting layers". Claim 46, lines 1-2, the phrase "the built-in resistive heating electrode" has no antecedent basis. Appropriate correction is required.

5. Claims 1-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 6-7, the phrase "...light of different spectra" is unclear as to what spectrum is it compared with. Is it compared with the original spectrum of the organic light-emitting device before the device is heated?

It is unclear where is the light-to-heat conversion layer being formed in the device as claimed in claims 3, 15, 24 and 40.

It is unclear where is the built-in resistive heating electrode being formed in the device as claimed in claims 4, 17, 29, 45 and 46.

It is unclear where is the external heating source being located in the device as claimed in claims 5, 16, 33 and 48.

Claim 9, lines 1-2, the phrase "each of the high-energy-gap carrier-blocking layer" is unclear if there is only one high-energy-gap carrier-blocking layer in claim 1.

Claim 9, lines 2-3, the phrase "the glass transition temperatures of the high-energy-gap carrier-blocking layer" is unclear whether it is being referred to "the glass transition temperature of the high-energy-gap carrier-blocking layer".

Claim 11, line 3, the phrase "a layers of the reconfigurable light-emitting device" is unclear whether it is being referred to "a plurality of layers of a reconfigurable light-emitting device".

Claim 11, line 6, the phrase “the structure of the reconfigurable organic light-emitting layer being locally reconfigured” is unclear whether it is being referred to “the structure of the reconfigurable organic light-emitting layers being locally reconfigured”.

Claim 11, line 8, the phrase “light of different spectra...” is unclear as to what spectrum is it compared with. Is it compared with the original spectrum of the organic light-emitting device before the device is reconfigured?

Claim 13, lines 1-2, the phrase “each of the high-energy-gap carrier-blocking layer” is unclear if there is only one high-energy-gap carrier-blocking layer in claim 12.

Claim 13, line 3, the phrase “the high-energy-gap carrier-blocking layers” is unclear if there is only one high-energy-gap carrier-blocking layer in claim 12.

Claim 20, line 11, the phrase “light of different spectra...” is unclear as to what spectrum is it compared with. Is it compared with the original spectrum of the organic light-emitting device before the device is reconfigured?

Claim 22, lines 1-2, the phrase “each of the high-energy-gap carrier-blocking layer” is unclear if there is only one high-energy-gap carrier-blocking layer in claim 21.

Claim 22, line 3, the phrase “the high-energy-gap carrier-blocking layers” is unclear if there is only one high-energy-gap carrier-blocking layer in claim 21.

Claim 36, line 13, the phrase “light of different spectra...” is unclear as to what spectrum is it compared with. Is it compared with the original spectrum of the organic light-emitting device before the device is reconfigured?

Claim 38, lines 1-2, the phrase “each of the high-energy-gap carrier-blocking layer” is unclear if there is only one high-energy-gap carrier-blocking layer in claim 37.

Claim 38, line 3, the phrase "the high-energy-gap carrier-blocking layers" is unclear if there is only one high-energy-gap carrier-blocking layer in claim 37.

6. Claims 1, 11, 20 and 36 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

7. The following is a statement of reasons for the indication of allowable subject matter: The first major difference in the claims not found in the prior art of record is the organic light-emitting layers and the high-energy gap carrier-blocking layer can be heated to induce the inter-diffusion process, so as to change the structure of the reconfigurable organic light-emitting device to emit light of a spectrum different than a spectrum of the device before the device is heated. The second major difference in the claims not found in the prior art of record is the structure of the reconfigurable organic light-emitting layers being locally reconfigured via a patterned heating source, and by applying a bias voltage between the upper electrode and the lower electrode, light of a spectrum, different than a spectrum of the original light-emitting device, being emitted. The third major difference in the claims not found in the prior art of record is the structure of the layer of the reconfigurable organic light-emitting device can be reconfigured via a patterned heating source, and by applying a bias voltage between the upper electrode and the lower electrode, light of a spectrum, different than a spectrum of the original light-emitting device, can be emitted. The fourth major difference in the claims not found in the prior art of record is the structure of the layer of the reconfigurable organic light-emitting device is reconfigured via a patterned heating source, and by applying a bias voltage between the upper electrode and the lower

electrode, controlled by the transistor circuit, light of a spectrum, different than a spectrum of the original light-emitting device, is emitted.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Loke whose telephone number is (571) 272-1657. The examiner can normally be reached on 7:50 am to 5:20 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lee can be reached on (571) 272-1732. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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February 4, 2005

Steven Loke
Patenting Examiner
Steven Loke